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Limiting Regret

Building the Army We Will Need

Timothy M. Bonds

RAND Office of External Affairs

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August 2015

Testimony presented before the National Commission on the Future of the Army on August 18, 2015

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Timothy M. Bonds¹
The RAND Corporation

Limiting Regret
*Building the Army We Need*²

Before the National Commission on the Future of the Army

August 18, 2015

Introduction

National Interests, National Security Threats, and Capabilities Needed to Address Them

This testimony addresses how the U.S. Army—as part of a Joint, interagency, intergovernmental, and multinational force—can help the nation achieve its highest-level national security interests and mitigate the most important risks.³ In a resource-constrained environment, such as the one we are experiencing now, it is particularly important to assess how well our strategies and plans meet these desired ends.

Our national interests have remained remarkably constant over time and between presidential administrations.⁴ In the 2015 National Security Strategy (NSS), President Obama listed the “enduring national interests” of the United States as:⁵

- The security of the United States, its citizens, and U.S. allies and partners;
- A strong, innovative, and growing U.S. economy in an open international economic system that promotes opportunity and prosperity;

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² This testimony is available for free download at <http://www.rand.org/pubs/testimonies/CT437.html>.

³ The work described in this testimony is based on more than three decades of RAND national security research. In addition to the published work cited in this document, insights from RAND's wargaming and theater-level analysis capabilities inform the assessments related in the following pages.

⁴ President Bush listed the following national interests: champion aspirations for human dignity; strengthen alliances to defeat global terrorism and work to prevent attacks against us and our friends; work with others to defuse regional conflicts; prevent our enemies from threatening us, our allies, and our friends with weapons of mass destruction; ignite a new era of global economic growth through free markets and free trade; expand the circle of development by opening societies and building the infrastructure of democracy; develop agendas for cooperative action with other main centers of global power; and transform America's national security institutions to meet the challenges and opportunities of the twenty-first century. *National Security Strategy*, President George W Bush, The White House, 2002.

⁵ *National Security Strategy*, President Barak Obama, The White House, 2015.

- Respect for universal values at home and around the world;
- A rules-based international order advanced by U.S. leadership that promotes peace, security, and opportunity through stronger cooperation.

In the 2015 National Security Strategy, President Obama lists the “top strategic threats”—in priority order—as:

- Catastrophic attack on the U.S. homeland or critical infrastructure;
- Threats or attacks against U.S. citizens abroad and our allies;
- Global economic crisis or widespread economic slowdown;
- Proliferation and/or the use of weapons of mass destruction (WMD);
- Severe global infectious disease outbreaks;
- Climate change;
- Major energy market disruptions;
- Significant security consequences associated with weak or failing states (including mass atrocities, regional spillover, and transnational organized crime).

The Department of Defense (DoD)—as part of a “whole of government approach”—develops strategies to defeat or mitigate the most serious threats to the nation and plans for and resources the military forces and capabilities needed to execute the chosen strategy. One can think of the Army’s ability to help execute the nation’s defense strategy in three dimensions: (1) the number of Army soldiers, which is referred to as “end-strength”; (2) how well prepared the Army’s units are to operate, which is called their “readiness”; and (3) how modern Army equipment is.⁶ Although all three dimensions are critical, this testimony focuses on the first two dimensions: how big and how ready the nation needs its Army to be—from a Joint perspective—to deploy enough ready soldiers to fulfill America’s commitments and to deal with potential surprises down the road.⁷

⁶ John McHugh, Secretary of the Army, and Raymond T. Odierno, Chief of Staff of the Army, *Army Posture Statement 2014*, Headquarters, Department of the Army, 2014.

⁷ The Army may also need significant investments in modernization to keep pace with potential adversaries. For example, Russian and Chinese rocket artillery significantly outranges U.S. battlefield systems, thus putting U.S. forces at risk of artillery attack without being able to subject those threat systems to counter-battery fires. See John Gordon et al., *Comparing U.S. Army Systems with Foreign Counterparts: Identifying Possible Capability Gaps and Insights from Other Armies*, RR-716-A, RAND, 2015.

Understanding the Potential for Strategic Failure and Regret—A Quick Look at the Recent Past

The DoD—and the Army—estimate how many ground forces are needed to achieve the security goals set by the President given existing and emerging threats.⁸ Failure to correctly estimate the numbers of soldiers needed, or to adequately resource the Army to provide them, can lead to a failure of the U.S. strategy and subsequent regret.⁹ In this context, strategic failure refers to the failure of the forces provided by DoD to meet key national interests laid out above.

A quick look at the recent past can provide important examples of how changes in strategy can cause a spike in troop demands that the Army may struggle to meet. In 2007, the Bush Administration determined that it would need to “surge” an additional 5 brigades and supporting troops to Iraq to achieve the administration’s objectives there.¹⁰ In 2008, the Bush Administration also decided to send additional troops to Afghanistan to meet an urgent request by U.S. commanders.¹¹ This Afghanistan surge was continued and expanded by the Obama Administration to reverse “years of neglect.”¹²

Unfortunately, insufficient ground forces existed to meet the demands in both Iraq and Afghanistan. No more soldiers or marines could be sent to Afghanistan until they were taken out of Iraq.¹³ And yet commanders in Iraq were arguing for slower cuts in their troop strength.¹⁴ This necessitated a compromise between the theaters, with the availability of soldiers for Afghanistan closely tied to the drawdown of U.S. forces in Iraq.¹⁵

In the Fall 2009, despite increases of 63,000 active component soldiers by 2008, the Army was deploying as many soldiers as it could to cover the surge in troops for Iraq and Afghanistan and other global commitments (see Figure 1). By 2009, the Army had committed 183,000 troops on the ground for these

⁸ We will also assess the degree to which ground forces from the Marine Corps may fill some of the gaps that we identify.

⁹ Here, we are using the following definition of regret: “n. ‘Sorrow, remorse, or repentance due to reflection on something one has done or omitted to do. Also an instance of this’; and *trans.* v. ‘To feel or express sorrow, distress, disappointment, etc., on account of (some event, fact, etc.); to feel sorrow, remorse, or repentance for (an action, etc.)’.” *Oxford English Dictionary*, accessed online 29 July 2015.

¹⁰ “The War Within—Outmaneuvered and Outranked, Military Chiefs Became Outsiders,” Bob Woodward, *Washington Post*, September 8, 2008.

¹¹ “Bush Troop Surge to Stem Rise of Taliban,” Sarah Baster, *London Sunday Times*, October 12, 2008; and “General: Urgent Need for Troops in Afghanistan Now,” Lolita C. Galdor, Associated Press, *Miami Herald*, October 2, 2008.

¹² Comment attributed to Admiral Mike Mullen, Chairman of the Joint Chiefs of Staff. See “Top Officer Offers A Dire Assessment On Afghanistan,” Bryan Bender, *Boston Globe*, August 26, 2009. After U.S. troops in Afghanistan were more than doubled—from 33,000 to 68,000—Undersecretary of Defense Michele Flournoy stated that “We are pursuing for the first time a fully resourced counterinsurgency strategy.” See “Gates Wants Review of Afghan Plan Next Year,” Anne Gearan, Associated Press, *Washington Post*, May 20, 2009.

¹³ Interview with Admiral Mullen, *Jim Lehrer Newshour* (PBS), July 22, 2008.

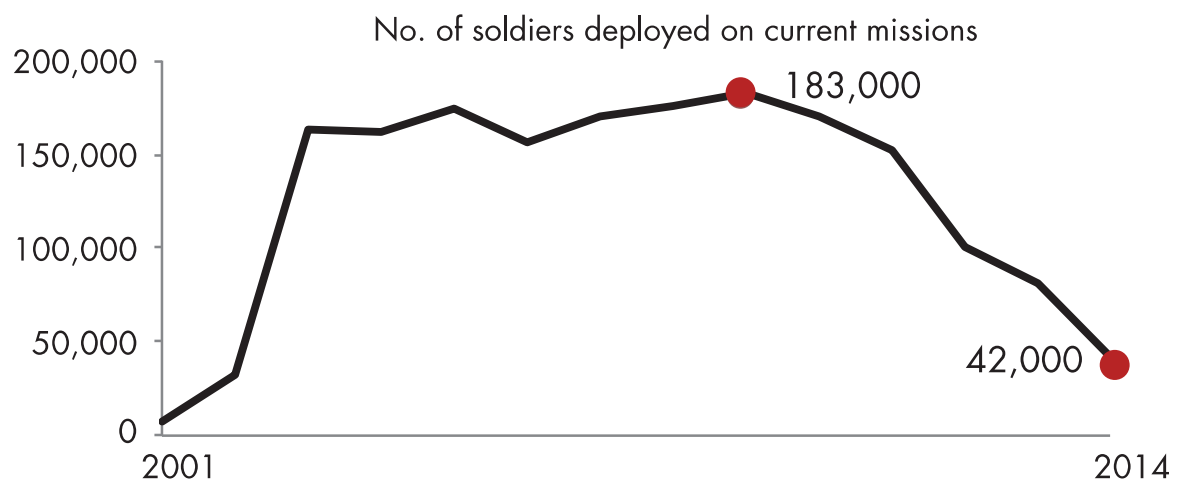
¹⁴ “Gen. Petraeus Recommends Delay In Iraq Troop Cuts,” Julian E. Barnes, *Los Angeles Times*, September 5, 2008.

¹⁵ “Plan Would Shift Forces From Iraq to Afghanistan,” Michael R. Gordon and Thom Shanker, *New York Times*, September 5, 2008.

operations, and President Obama was about to announce a surge of troops to Afghanistan.¹⁶ To provide this many soldiers, the U.S. Army had already lengthened deployments to 15 months and was subsequently forced to increase rotation rates beyond 1:1.¹⁷

Secretary Robert M. Gates announced an end-strength increase of 22,000 soldiers to backfill units and care for wounded warriors; as a result, the Army grew to 566,000 soldiers.¹⁸ Over the next five years from 2009, Total Army deployments for Operation Iraqi Freedom (OIF) virtually ended and deployments for Operation Enduring Freedom (OEF) (including operations outside Afghanistan) and around the world tapered off to about 42,000 by the end of July 2014.¹⁹

Figure 1. Army Troop Deployments from 2001 to 2014



¹⁶*Army Deployments to OIF and OEF*, Timothy M. Bonds, Dave Baiocchi, Laurie L. McDonald, DB587; and Defense Manpower Data Center, *Contingency Tracking System Deployment File*, July 31, 2011.

¹⁷Troops from all the services are deployed at some ratio – which the Army describes as the time that “boots are on ground” in a contingent theater, or BOG, and time that troops are at home, or “dwell”. A 1:1 BOG:dwell ratio implies rotating between equal periods of time conducting the mission on the ground and time back at home. See “War Demands Strain Military Readiness,” Associated Press, February 09, 2008; and “Mullen: Money Crisis Will Impact Security,” Tom Philpott, *European Stars and Stripes*, January 31, 2009.

¹⁸“Gates Says U.S. Army’s Size Will Grow By 22,000”, Elisabeth Bumiller, New York Times, July 21, 2009, and National Defense Budget Estimates For FY 2016, Office Of The Under Secretary Of Defense, (Comptroller) March 2015

¹⁹By “Total Army,” we are including deployments of Army active, National Guard, and Army Reserve personnel. See *Measuring and Retaining the U.S. Army’s Deployment Experience*, RAND, RR-570, Caoliann O’Connell, Jennie W. Wenger, Michael L. Hansen, with updates from Defense Manpower Data Center, *Contingency Tracking System Deployment File*, July 31, 2014.

In the context of the force drawdowns in OIF and OEF, the *Quadrennial Defense Review 2014* (which we will refer to as the “QDR”), released in March 2014, began to rebalance U.S. military operations toward a focus in the Asia–Pacific region. For the Army, this entailed prescribed cuts in end-strength, from the high of 566,000 active component soldiers to 450,000—or as low as 420,000 if sequestration continued.²⁰ The QDR also directed the Army to cut the Army Reserve from a high of 206,000 to 195,000 soldiers and the Army National Guard of the United States from a high of 358,000 to 335,000 soldiers.

However, in the time since the QDR report was released, new threats to the nation’s security have emerged that affect current and potential demand for Army ground forces. In this testimony, RAND assesses three that the President has specifically addressed: Islamic State in Levant (ISIL), Russian aggression in the Baltics, and North Korean provocation or nuclear threats.

Subsequent to the release of the QDR, ISIL has emerged, adding to violent extremist activity throughout Africa, the Middle East, and Asia. Other violent extremists include al Qaeda affiliates in Yemen, Libya, Mali, Somalia, and the Philippines; Boko Haram and other terror groups in equatorial Africa; and cyber- and narco-criminals around the world. Worse, the Russians have invaded Crimea and Eastern Ukraine. This raises concerns about the security of the Eastern NATO allies, especially Estonia, Latvia, and Lithuania. Finally, North Korea continues to develop its strategic nuclear and long-range missile capabilities and to provoke South Korea with threatening behavior. These provocations follow the 2010 North Korean artillery attacks on Yeonpyeong Island, which killed South Korean marines and civilians. This aggressive behavior and the continued bellicose nature of North Korean political rhetoric raise the potential that future provocations might spiral out of control.

Other potential trouble spots also come to the forefront from time to time that may affect future demands on ground forces. These include Iran’s nuclear program and China’s territorial disputes with its neighbors, including Japan and the Philippine Islands—two U.S. treaty allies. “Wild cards” also emerge from time to time, such as the Ebola outbreak in Africa last year.

This snapshot of the recent past highlights the uncertainty that the Army faces in trying to understand what forces it will need for future demands. So what does the nation require from the Army to meet these challenges, and how does this national need translate to sufficient end-strength to avoid strategic failure and regret? This testimony breaks that question down into five components that RAND will address:²¹

- How are we using the Army we have now?

²⁰*Quadrennial Defense Review 2014*, Department of Defense.

²¹This question must be answered with the recognition that the ground force is a part of a Joint military capability that is one component of national power that includes diplomatic, economic, and other measures.

- What commitments has the United States made and how do they compare with our force plans to meet them?
- What regret might result from not meeting those commitments?
- What ground forces would be needed to meet the commitments?
- What are some alternative approaches to limit regret?

How Are We Using the Army We Have Now?

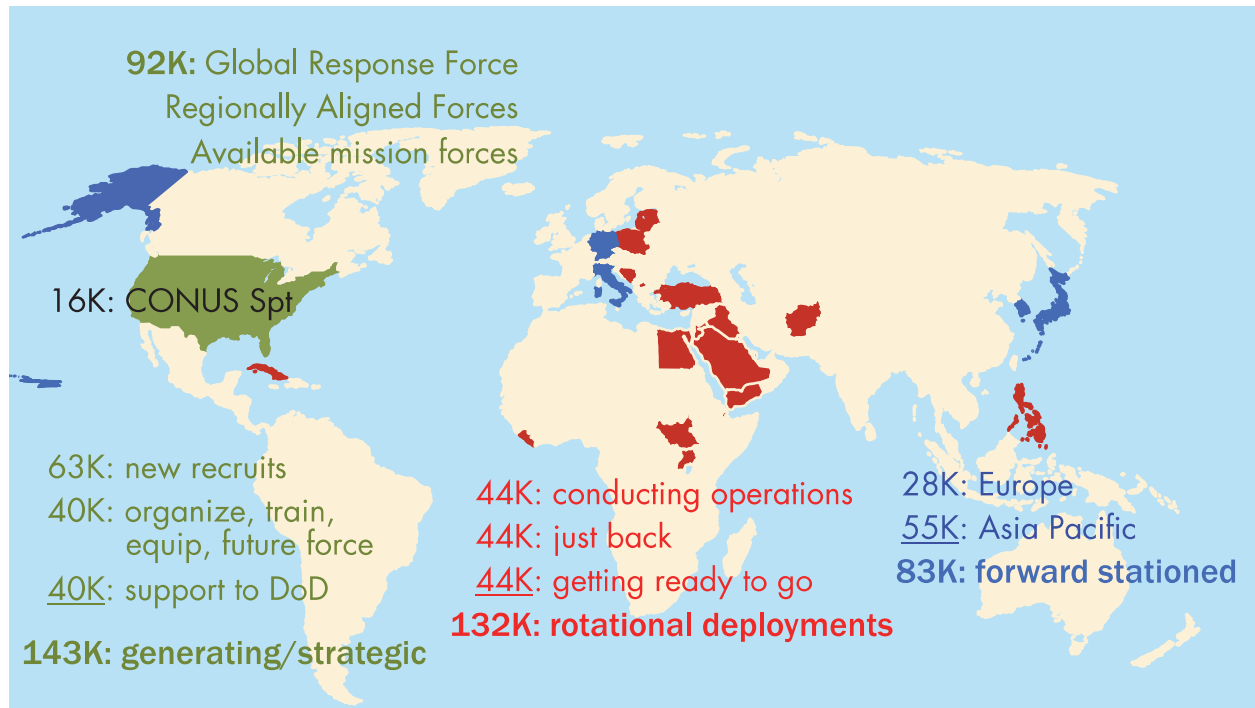
At present, the United States maintains forces around the world, as shown in Figure 2.²² As shown on the map in red, the Army has approximately 44,000 troops committed to current operations. This includes 2,600 soldiers in Iraq²³ and 7,200 soldiers in Afghanistan, where the mission has been extended through the end of 2016. There are 14,000 other soldiers deployed elsewhere in that region, and 20,000 more soldiers are conducting deployed operations elsewhere around the world, including 4,900 soldiers now on rotational assignment in South Korea.²⁴

²²Most of the soldiers listed are from the Army active component. However, the Army also had 15,500 National Guard and Army Reserve soldiers either available for mobilization or on mobilization orders. The numbers in the figure and discussed in the text are from the following sources: DB-571-A, 2009; *Army Posture Statement*, 2014 and 2015; Assistant Secretary of the Army for Financial Management & Comptroller, 2015 Washington-ASMC National Capital Region PDI, Honorable Robert M. Speer, 3 Mar 2015; *Army Global Commitments*, with updates from 7 July, 2015; Defense Manpower Requirements Report, 2015; Congressional Budget Office, 2009.

²³This number may go up, because the President has authorized an additional 1,500 troops for this operation.

²⁴Some of these other deployed forces likely comprise foreign area officers (FAOs) and the 23,000 Army special operations forces (SOF) provided by U.S. Army Special Operations Command, although these soldiers are not separately identified. Also, some portion of the forces assigned to Europe, Alaska, and Hawaii participate in the rotational deployments shown. In some months, then, a few of these soldiers may be double-counted.

Figure 2. Soldiers Conducting Current Worldwide Missions



Service members are generally deployed on a rotational basis with deployments followed by longer periods of time at home station. For the Army, current practice is 1 deployment of 9 months followed by at least twice as much time (18 months) at home, which is referred to as a 1:2 deployment ratio.²⁵ At a 1:2 deployment ratio, it takes 132,000 troops to keep 44,000 troops deployed in the field: 44,000 conducting operations, 44,000 just back from conducting operations, and 44,000 getting ready to go out and conduct operations.

The Army also has 83,000 forward-stationed troops, including 28,000 troops in Europe with NATO and 55,000 more forward-stationed in the Asia-Pacific region. Since these troops are home-based in these regions, there is no rotational deployment, which means the 83,000 soldiers are conducting their missions from their home bases. Forward-stationed troops are indicated on the map with blue.

Finally, the Army has 143,000 soldiers conducting what DoD calls “infrastructure activities” (shown on the map in green). We will refer to these as “generating force” or “strategic force” activities.²⁶ At any given

²⁵During the peak of operations in Iraq and Afghanistan, the Army deployed soldiers for one year or more, followed by a year or more at home. Deployment ratios for some soldiers, for some periods of time, reached 1:1; and some deployments were extended to 15 months followed by a one-year break.

²⁶ The Army often uses the terms “Generating Force” or “Institutional Army” to describe the soldiers conducting these activities. However, these terms diminish the crucial function these soldiers play in supporting the national security strategy, and may be used dismissively – and perhaps without a careful assessment of which activities are crucial for

time, about 63,000 new soldiers are being trained or educated; 40,000 soldiers are organizing, training, and equipping the Army—and building the capabilities we will need in the future; and 40,000 soldiers who provide support for Joint and national missions, including the 24,000 soldiers in the Army Medical Command, 8,000 soldiers in Joint assignments, and other support to the intelligence community, Combatant Commands, and defense-wide activities.

Summing these current commitments, the Army has nearly 360,000 soldiers meeting the demand of ongoing operations and infrastructure activities. In addition, the Army had 16,000 soldiers conducting support operations in the continental United States (CONUS), and 92,000 soldiers in CONUS supporting the Global Response Force, Regionally Aligned Force missions, or available for deployment.

What Commitments Has the United States Made and How Do They Compare With Our Force Plans to Meet Them?

The Army also has to prepare soldiers and units to help Joint forces respond to new contingencies. To determine potential demand for new contingencies, we need to compare our current national commitments—reaffirmed in the most recent National Security Strategy and Presidential statements—with the demands identified above.

We focus here on just three commitments that became particularly salient in the same year that the QDR was released. In Table 1, we compare what is said in the *National Security Strategy 2010 and 2015* and by President Obama in speeches and policy statements with what is said in the *Quadrennial Defense Review 2014*.²⁷ What we see are some significant shortcomings in the forces planned to meet the three commitments.

First, the National Security Strategy commits the United States to “combatting the persistent threat of terrorism.” President Obama went a step further, promising that the United States “will degrade and ultimately destroy” ISIL.²⁸ However, these commitments reflect a threat that became much worse after the current force planning was completed. The QDR did not anticipate the threat that ISIL is currently posing and was silent on the continuing threat posed by the Taliban; thus, our planning to address violent

the continuing existence of the Army or to ensure that it provides the “ways” and “means” to meet current and future National “ends.” Therefore, we use the term “Strategic Force” to refer to those soldiers generating new concepts and forces to be ready for future missions; and providing soldiers and units to support the intelligence, special operations, medical, law enforcement, and other joint missions and national activities. The “Strategic Force” tends to include more senior and experienced soldiers. We refer here to new recruits and cadets and the soldiers that organize, train, and equip the Army as the “Generating Force.”

²⁷*National Security Strategy*, President Barak Obama, The White House, 2010 and 2015; *The Quadrennial Defense Review*, Chuck Hagel, The Department of Defense, Pentagon, 2014.

²⁸On September 10, 2014, President Obama stated the following: “My fellow Americans, tonight I want to speak to you about what the United States will do with our friends and allies to degrade and ultimately destroy the terrorist group known as ISIL.”

extremists has mainly focused on efforts to continue to degrade al Qaida. It turns out that the Middle East is in much worse shape than RAND assumed during the QDR: ISIL has emerged as a threat and is seizing population centers; the Taliban remains a threat to the Government of Afghanistan; and other groups have emerged, such as Houthis in Yemen, that are wrecking stability in the Middle East.

Table 1. U.S. Commitments Compared to Force Planning

National Strategy and Presidential Commitments	Shortcoming of QDR 2014 Force Planning
Combat persistent threat of terrorism “We will degrade—and ultimately destroy—ISIL.”	Scope and scale of ISIL threat was not anticipated.
Assure allies, deter aggression Defeat, deny aggression in multiple theaters “We will defend our NATO allies . . . we will defend the territorial integrity of every single ally.”	Russian invasion of the Ukraine and potential threat to NATO Baltic states was not anticipated.
Prevent the spread and use of WMD “U.S. and South Korea stand shoulder to shoulder in the face of Pyongyang’s provocations and in refusing to accept a nuclear North Korea.” “No greater threat to the American people than WMD.”	Scope and scale of eliminating North Korean WMD program larger than that resourced in force plan.

As a second important case, President Obama has prioritized “assuring allies and deterring aggression” and “defeating and denying aggression in multiple theaters.” In a particularly moving declaration of this commitment in Tallinn, Estonia, President Obama stated that the United States, as part of NATO, would “be here” to defend the territorial integrity of Estonia, Latvia, and Lithuania. He went on to say: “[Y]ou lost your independence once; with NATO you will never lose your independence again.”²⁹ However, the QDR did not anticipate the Russian invasion of Ukraine and the resulting implications for the NATO Baltic states. The QDR report does observe “Russia’s multidimensional defense modernization and actions that violate the sovereignty of its neighbors presents risks,” but the response offered was that “[w]e will engage Russia to increase transparency and reduce the risk of military miscalculation.” While continuing to engage Russia is necessary and helpful, the current planning construct does not address the forces and posture needed to deter Russian aggression in Eastern Europe.

As a third important case, North Korea poses several threats to the United States, South Korea, and the region. The historical North Korean threat has been a large conventional invasion, with armored and

²⁹On September 03, 2014, President Obama stated at the Nordea Concert Hall in Tallinn, Estonia: “Article 5 is crystal clear: An attack on one is an attack on all. So if, in such a moment, you ever ask again, ‘who will come to help,’ you’ll know the answer—the NATO Alliance, including the Armed Forces of the United States of America, ‘right here, [at] present, now!’ We’ll be here for Estonia. We will be here for Latvia. We will be here for Lithuania. You lost your independence once before. With NATO, you will never lose it again.”

infantry forces attacking south supported by SOF and a massive artillery barrage, perhaps using both conventional and chemical weapons. This threat seems to have receded in the past few decades, because a wealthy and technologically advanced South Korea can now provide well-trained and armed forces to defeat a conventional invasion.

An evolving threat is one that is posed by the massive amount of North Korean artillery within range of Seoul and other border areas. North Korea has over 13,000 artillery pieces and multiple rocket launchers, about 8,000 of which are garrisoned within 100 miles of South Korea in protected underground facilities. In addition to the prospect of nuclear weapons, North Korean artillery can fire a variety of chemical weapons.³⁰ In 2000, DoD stated the following:

[W]ithout moving any artillery pieces, the North could sustain up to 500,000 rounds an hour against Combined Forces Command defense for several hours. The artillery force includes 500 long-range systems deployed over the past decade. The proximity of these long-range systems to the Demilitarized Zone threatens all of Seoul with devastating attacks.³¹

Although South Korea has been living close to a North Korean artillery threat for many years, it is becoming a potentially more dangerous threat for several reasons. First, North Korea is reported to be expanding its long-range artillery and rocket units, putting more South Korean civilians within range even while South Korea builds new housing and factories ever closer to the Demilitarized Zone (DMZ).³² Second, North Korea has used artillery to attack South Korean territory in 2010, inflicting civilian and military casualties. Although the attack was relatively small and contained, it caused the South Korean leadership to devolve authority to respond in future attacks to tactical commanders³³ and ordered them to respond with “countermeasures three to five times stronger than an enemy attack.”³⁴ Both measures might lead to more rapid escalation of future provocations. Third, the continued North Korean development of nuclear weapons and long-range missiles raises North Korea’s ability to escalate and may encourage a more provocative North Korean diplomatic and military posture.

³⁰Military and Security Developments Involving the Democratic People’s Republic of Korea, Office of the Secretary of Defense, Annual Report to Congress, 2012.

³¹U.S. Department of Defense, 2000 Report to Congress—*Military Situation on the Korean Peninsula*, September 12, 2000.

³²*Military and Security Developments Involving the Democratic People’s Republic of Korea*. Office of the Secretary of Defense Annual Report to Congress, 15 FEB 2013.

³³“South Korean officials cite Yeonpyeong as an instance in which their forces returned fire too late and too timidly — a mistake that they pledge will not be repeated. If faced with a similar attack, President Park Geun-hye has told her military, the South should strike back ‘without political consideration’ and without waiting for top-level approval.” “South Korea’s new stance is not just rhetorical. After the Yeonpyeong shelling, Seoul revised its rules of engagement, allowing front-line commanders to ‘take aggressive action . . . and then report it up the chain of command,’ Lee Myung-bak, South Korea’s president from 2008 until this year, recently told a major South Korean daily. Lee added that the United States was initially opposed to the rule changes.” Source: “Island Attack Toughened S. Korea’s Will, Seoul more prepared to respond robustly to provocations by North,” Chico Harlan, *Washington Post*, April 15, 2013.

³⁴S. Korea responds to North’s artillery with new engagement rules, by Kim Eun-jung, Yonhap News Agency, 2014/04/01 10:41.

The QDR planning construct places the most emphasis on the threat posed by the North Korean nuclear program and the long-range missiles under development that may, someday, carry them. The George W. Bush and Obama Administrations have emphasized the dangers that WMD pose to the United States and its allies, friends, and interests. During a state visit to South Korea last year, President Obama reiterated that the United States would refuse to accept a nuclear Korea.³⁵ Recently, U.S. and Chinese experts have estimated that the North Koreans may be able to produce enough fissionable plutonium and uranium to build up to 75 weapons by 2020.³⁶

Opinions differ about how close the North Koreans are to building a miniaturized weapon capable of fitting within their long-range missiles, but their recently revealed ability to separate uranium could give them the ability to build gun-assembled fission weapons similar to the W-33 deployed by the U.S. Army in 1956.³⁷ This weapon was small enough to be fired from an 8-inch artillery tube and yet produced yields of up to 10 kilotons.³⁸ If North Korea produced such a weapon, Seoul could be in range of nuclear weapons fired from existing artillery sites.

Finally, the collapse of North Korea could lead to the theft and proliferation of nuclear weapons and materials from a large number of research and development, manufacturing, testing, and weapons storage sites. President Obama has been especially clear about the threat that this would pose to our nation and its people when he stated that:

There is no greater threat to the American people than weapons of mass destruction, particularly the danger posed by the pursuit of nuclear weapons by violent extremists and their proliferation to additional states.³⁹

Unfortunately, neither the QDR nor the NSS say much about how the United States would effectively respond to these threats. The QDR references “maintain[ing] a robust footprint in Northeast Asia.” The U.S. nuclear force and ballistic missile defense are specifically mentioned as the principal capabilities to deter a nuclear attack or to defeat the relatively small number of long-range North Korean missiles that might threaten the United States. The NSS states that U.S. nuclear forces will “communicate to nuclear-armed adversaries that they cannot escalate their way out of failed conventional aggression.”⁴⁰

³⁵On April 24, 2014, at the Blue House in Seoul, Republic of Korea, President Obama stated: “With regard to North Korea, the United States and South Korea stand shoulder-to-shoulder both in the face of Pyongyang’s provocations and in our refusal to accept a nuclear North Korea. Threats will get North Korea nothing other than greater isolation. And we’re united on the steps Pyongyang needs to take, including abandoning their nuclear weapons and ballistic weapons programs and living up to their international obligations.”

³⁶North Korea has had a uranium enrichment capacity since at least November 2010. Together with its plutonium separation capability, it has an estimated 12 nuclear weapons as of January 2015 with the capacity to build 4 to 6 more each year. Source: Siegfried S. Hecker, “The real threat from North Korea is the nuclear arsenal built over the last decade” *Bulletin of the Atomic Scientists, Analysis*, 01/07/2015.

³⁷Nuclear Weapons Data Book, Volume I, U.S. Nuclear Forces and Capabilities, Thomas B. Cochran et al, Natural Resources Defense Council, Ballinger Publishing Company, Cambridge, MA, 1984

³⁸See <http://nuclearweaponarchive.org/Usa/Weapons/Allbombs.html>

³⁹The White House, The National Security Strategy of the United States of America, Washington DC, May 2010.

⁴⁰President Obama, National Security Strategy (2015)

However, North Korea may launch many shorter-range missiles against South Korea or Japan, potentially saturating their ballistic missile defenses. Worse, the U.S. strategy does not directly address the artillery threat to Seoul, including the potential use of North Korean artillery to employ WMD.

Perhaps most troubling of all, the 2014 QDR report relies on SOF to counter WMD. Although SOF would be crucial for conducting discrete operations and conducting reconnaissance and surveillance, SOF by itself cannot provide the scope and scale of capabilities needed to secure an entire national nuclear program from theft and proliferation.⁴¹ North Korea's WMD program is estimated to comprise between 100 and 200 such sites.⁴² Eliminating this program after a North Korean collapse—including finding, seizing, removing, and rendering safe weapons, components, and materials—would require a large and capable ground force.

In addition to these commitments, the United States has other alliances and treaty commitments that are not explicitly addressed in this paper, but which place additional demands upon ground forces. These include our defense commitments to Japan, the Republic of the Philippine Islands, and Thailand in the Asia-Pacific, and assurances that we have given to Jordan, Israel, and our Persian Gulf allies and partners to continue our assistance to their own security efforts and to provide some measure of protection to them. Most of the soldiers conducting the deployed missions described in Figure 2 are, in fact, upholding the training, advising, and other defense commitments that we have made to these important allies and friends. As we assess our ability to conduct the missions we use in this paper as examples, it is important to note that our security, as well as our credibility as a dependable ally, depends to a large degree on how conscientiously we also keep these commitments.

What Regret Might Result from Not Meeting Our Commitments?

What If ISIL Remains Strong?

If the United States abandons—or fails in—its efforts to degrade or destroy ISIL, one potential regret is the formation of an enduring ISIL terror-state with the leadership, safe havens, and resources to attack Western countries and interests. ISIL exploits captured territory to raise funds, attract new recruits, train terrorists, and support terror operations in Syria, Iraq, and elsewhere. It may be unlikely that the United States will destroy ISIL with our current level of effort and partner capabilities, although it does appear that ISIL's ability to grow has been checked to some degree. However, if ISIL were allowed to survive

⁴¹Timothy M Bonds, Eric V Larson, Derek Eaton, and Richard E Darilek, *Strategy-Policy Mismatch: How the US Army Can Help Close Gaps in Countering Weapons of Mass Destruction*, Santa Monica: RAND, RR-541-C, 2014.

⁴²*Ibid.*

and evolve into a quasi-state, it would lead to continued instability in Iraq and Syria, if not to their *de facto* partition. As a state, ISIL could gain legitimacy among Sunnis in the Islamic world. To the degree that ISIL poses a terror threat to the United States and its allies, as well as inflicting great harm on the people that it captures and rules, a growth in its capabilities is a potential future regret.⁴³

What If Russia Takes Military Action in The Baltics?

Russia has embarked on an extended campaign to reshape at least some of the former Soviet republics on its periphery. First in Georgia and now Ukraine, Russian forces have created or maintained autonomous regions for Russian expatriates through force of arms. Russia may be inclined to convince the Baltic states of Estonia and Latvia that the same treatment may be in store for them, perhaps to coerce closer relationships or to drive a wedge between them and other NATO nations. To bolster confidence in the alliance, the United States and other NATO nations have begun to deploy limited numbers of combat troops on a rotational basis to the Baltics to more clearly demonstrate NATO's commitment to their collective defense. The forces thus far committed, however, are not sufficient to counter coercion or deter Russian aggression by denying its objectives in a rapid *fait accompli*.

If Russia decides to “re-shape” its relationship or borders with the Baltic states, it could take one or several alternative approaches. First, Russian “volunteers” could enter Estonia and Latvia with the ostensible purpose of gaining autonomy for regions—such as Narva in Estonia—with a large expatriate presence.⁴⁴ These “volunteers” could work to gain some plausible measure of local support and then begin irregular operations against government security forces. Although it is not clear that ethnic Russians in Estonia and Latvia desire either separation from their current governments or closer ties to Russia,⁴⁵ the Russians appear to be building the pretext to intervene in the Baltics through actions like reviewing the legality of their independence from the Soviet Union.⁴⁶ As in Ukraine, if they meet significant resistance, they could call on regular Russian Army units for support. By themselves, Estonian, Latvian, and Lithuanian defenses would be no match for Russian armored, artillery, and air defense forces. If the United States and other NATO nations were then to begin to deploy forces in support of the Baltic states, Russian conventional forces could launch a swift invasion and present a *fait*

⁴³Dave Johnson, “Fighting the Islamic State: The Case For Ground Forces,” *Parameter*, Army War College, Spring 2015, accessed online 12AUG at http://www.strategicstudiesinstitute.army.mil/pubs/Parameters/Issues/Spring_2015/Parameters_Spring%202015%20v45n1.pdf

⁴⁴Roughly 100,000 Estonian Russians, many concentrated in this region, carry a special gray passport, which labels them “aliens”—legal, but not citizens of Estonia or anywhere. See *Russian Minority Struggles In Post-Soviet Estonia*, National Public Radio, August 23, 2010, 12:00 AM ET.

⁴⁵“Russians of Narva, who make up 88 percent of the city's population, call the European Union and NATO their home. And while they may feel the emotional tug of Moscow and certainly have their grievances with the Estonian government in Tallinn, few say they want to follow the example of Crimea and join Russia.” See *Russians Of Narva Not Seeking 'Liberation' By Moscow*, By Tom Balmforth, Radio Free Europe, Radio Liberty, April 04, 2014

⁴⁶*Russia Reviewing Legality Of Baltics' Independence From Soviet Union*, By Radio Free Europe, Radio Liberty June 30, 2015.

accompli to NATO. If Russian forces attack, RAND estimates that, against currently stationed forces, they could reach the Baltic capitals in 36–60 hours.⁴⁷

The occupation of some or all of one or more of the Baltic states would leave the U.S. president with few and bad choices: The president could decline to use force but instead rely on economic sanctions to persuade the Russians to leave, a strategy that could drag on for months or years. This option could badly damage U.S. and NATO credibility and the integrity of the alliance by setting a precedent that an attack against one does not necessarily oblige a military response from all. Or the president could choose to launch a counteroffensive to retake NATO territory after deploying enough forces to be decisive. This second option is particularly dangerous because Russia might declare the captured territory as part of Russia; in the past, it has reserved the right of first use of nuclear weapons to defend Russian territory.⁴⁸ This would potentially expose supporting NATO states such as Poland and Germany to attack with tactical nuclear weapons as well and may, thus, also present risks of NATO fracture.⁴⁹ At the very least, Russia would have the opportunity in the intervening months between its capture of the Baltics and the U.S.–NATO counteroffensive to build a strong defense and to attempt to weaken the resolve of NATO nations to continue armed conflict. Both the sanctions and counteroffensive choices may lead to significant regret that stronger measures were not taken to deter Russian misbehavior and aggression.

What If North Korea Provokes a War or Collapses?

As already mentioned, a series of provocations by North Korea could spark a war, perhaps leading to an artillery barrage of Seoul. South Korea would have few options other than seizing North Korean territory within artillery range of Seoul to remove this threat and to ensure that future bombardments would not happen.

U.S. ground forces might play several roles in such an operation. First, U.S. forces would be assigned to evacuate U.S. nationals from affected areas. This would be a huge undertaking and might grow into

⁴⁷See Terrence K. Kelly, *Stop Putin's Invasion Before It Begins*, U.S. News & World Report on March 20, 2015.

⁴⁸The 2000 Russian military doctrine “allows nuclear weapons use ‘in response to large-scale aggression utilizing conventional weapons in situations critical to the national security of the Russian Federation.’” Arms Control Association, Russian Military Doctrine, accessed at http://www.armscontrol.org/act/2000_05/dc3ma00, Aug 2, 2015. This doctrine has been raised in association with the Russian invasion of Crimea. “Russia was ready to put its nuclear forces on alert over the crisis in Crimea last year, such was the threat to Russian people there, President Vladimir Putin said in a documentary that aired on state TV on Sunday night. Asked if Russia was prepared to bring its nuclear weapons into play, Putin said: ‘We were ready to do it. I talked with colleagues and told them that this (Crimea) is our historic territory, Russian people live there, they are in danger, we cannot leave them.’ Putin said Moscow had had no choice but to act. ‘Crimea isn’t just any territory for us, it is historically Russian territory,’ he said.” “Russia was ready to put nuclear forces on alert over Crimea, Putin says,” by Laura Smith-Spark, Alla Eshchenko and Emma Burrows, CNN, Updated 12:19 PM ET, Mon March 16, 2015.

⁴⁹Russia made some threats along these lines to Denmark. See Russia threatens to aim nuclear missiles at Denmark ships if it joins NATO shield, Alessandro Garofalo, Reuters Business | Sun Mar 22, 2015 2:46pm EDT

providing more general humanitarian assistance and support to Korean civil authorities. Second, South Korean forces have been designed principally to defend against a multi-echelon invasion. They have not prioritized investments in the comprehensive logistics, combat engineering, and other maneuver capabilities needed to conduct offensive operations in hostile territory. U.S. forces, then, might be needed to provide these supporting capabilities. Third, the North Koreans are likely to have chemical and—some day—perhaps nuclear weapons deployed with their artillery and other forward-deployed combat formations. U.S. forces may have a role in seizing, securing, and safely removing these weapons and any large WMD production or storage sites that they may also run across. Finally, the South Korean Army may exhaust its combat strength before it is able to break through North Korean infantry and armored forces to root out all the artillery within range of South Korea. It may require U.S. ground forces—as well as air and naval forces—to help complete these operations.

The regret caused by not having an Army with sufficient capacity or capabilities to help South Korea might take several forms. First, there would be the regret of reneging on a promise made to a close and long-term ally. Second, there might be the recognition by North Korea that the United States is not able to effectively help South Korea if another contingency is absorbing U.S. attention and ground forces. Such an observation by North Korea might encourage it to increase its provocations or other belligerent actions. Third, there might be the recognition by South Korea that the United States has not maintained the capability to effectively help it, with potentially serious ramifications if South Korea decides that it must seek greater destructive capabilities—including, perhaps, nuclear weapons—to deal with catastrophic attack by North Korea's massive conventional, chemical, or nuclear weapons.

Alternatively, a collapse of the North Korean regime—as a result of war or economic collapse—leaves a large nuclear, chemical, and biological program unsecured and exposed to theft and proliferation. The North Korean program is massive, with up to 200 sites, according to a recent South Korean minister of defense.⁵⁰ The regret in this case would be loose WMD, especially “loose nukes”—nuclear weapons that could be sold to violent extremists and perhaps smuggled into U.S. or allied cities and detonated.

What Ground Force Would Be Required to Meet Commitments?

The U.S. response in each of the three exemplar missions we examined would comprise all levers of U.S. government power, including diplomacy, economic measures, and military force. Any military response would surely be Joint—including air, land, sea, space, and cyber—in combination with whatever forces our allies are willing and able to commit. RAND focused attention on the ground forces needed because

⁵⁰See Bonds et al., 2014 and Bruce W. Bennett and Jenifer Lind, “The Collapse of North Korea: Military Missions and Requirements,” *International Security*, Vol. 36, No. 2, Fall 2011, p. 101.

they were the component most stressed in the troop surges in Iraq and Afghanistan; ground forces were ordered to be cut significantly in the QDR; and by the nature of their size and operating location, ground forces are necessarily the most visible force to be committed to or withdrawn from operations.

We begin our estimate of ground force requirements by showing those already committed to generating or strategic force activities and current missions in Figure 3 below. This amounts to the 360,000 troops discussed earlier and reflects the Army's existing rotational practice.

Figure 3. Army Troops Needed to Support Current Operations



Degrading and Ultimately Destroying ISIL

RAND estimates that the forces already engaged in counter-terror and counter-insurgency missions in Figure 3 above are sufficient to continue current operations to degrade ISIL and other extremist groups. This includes forces assigned in Kuwait, Djibouti (including Joint Task Force–Horn of Africa), and in other worldwide counter-terror, partner capacity building, and stability operations. However, while such forces may be sufficient, they are likely to remain busy with these missions and could not easily be pulled away—at least in the near-term—for other operations. Furthermore, if the mission were to change significantly—say to include combat forces to help liberate the Iraqi cities of Mosul and Ramadi from ISIL—the forces needed to accomplish the increased scope of these missions would need to increase significantly.

Deterring and Defeating Aggression in the Baltics

Before we discuss the military posture needed to deter and defeat aggression in the Baltics—in terms of units and troops needed—it is worth discussing changes in U.S. political and military posture about Europe over the past two decades. In the 2002 *Annual Defense Report*, Secretary of Defense Donald Rumsfeld stated that:

Europe is largely at peace. Central European states are becoming increasingly integrated with the West, both politically and economically. An opportunity for cooperation exists with Russia. It does not pose a large-scale conventional military threat to NATO.⁵¹

In 2002, Army forces included a corps headquarters, two heavy divisions, six combat brigades, and their supporting forces for a total of about 70,000 troops.⁵² In 2005, the DoD made the decision to return both heavy divisions to the United States.⁵³ By the beginning of 2008, Army forces in Europe had declined to one corps and one division headquarters, four combat brigades (two of these armored), supporting forces, and 47,000 soldiers.⁵⁴ Unfortunately, the political posture by 2008 had deteriorated significantly, leading the Secretary of Defense Robert Gates to state:

Russia's retreat from openness and democracy could have significant security implications for the United States, our European allies, and our partners in other regions. Russia has leveraged the revenue from, and access to, its energy sources; asserted claims in the Arctic; and has continued to bully its neighbors, all of which are causes for concern. Russia also has begun to take a more active military stance, such as the renewal of long-range bomber flights, and has withdrawn from arms control and force reduction treaties, and even threatened to target countries hosting potential U.S. anti-missile bases. Furthermore, Moscow has signaled an increasing reliance on nuclear weapons as a foundation of its security. All of these actions suggest a Russia exploring renewed influence, and seeking a greater international role.⁵⁵

Relations between the U.S. and Russia continued to worsen. In 2015, President Obama stated that:

Russia's violation of Ukraine's sovereignty and territorial integrity – as well as its belligerent stance toward other neighboring countries – endangers international norms that have largely been taken for granted since the end of the Cold War.

We will deter Russian aggression, remain alert to its strategic capabilities, and help our allies and partners resist Russian coercion over the long term, if necessary.⁵⁶

⁵¹Annual Report to the President and the Congress, Donald H. Rumsfeld, Secretary of Defense, 2002

⁵²Department of Defense, Washington Headquarters Services Directorate For Information Operations And Reports Active Duty Military Personnel Strengths By Regional Area And By Country (309a), December 31, 2002 and Army 2002-03 Green Book, Association of the United States Army, October 2002

⁵³Annual Report to the President and the Congress, Donald H. Rumsfeld, Secretary of Defense, 2005

⁵⁴Statement on the Posture of the United States Army, 2008 Submitted by the Honorable Pete Geren and General George W. Casey Jr. to the Committees And Subcommittees Of The United States Senate and the House of Representatives 2d Session, 110th Congress, 26 February 2008 and Army 20027-08 Green Book, Association of the United States Army, October 2007

⁵⁵National Defense Strategy, June 2008, Robert M. Gates, Secretary of Defense

⁵⁶National Security Strategy, Barak Obama, The White House, February 2015

Since 2008, U.S. Army forces in Europe have been cut further, to one Stryker brigade and one light infantry brigade and 28,000 total troops. This substantial reduction in U.S. Army posture in Europe may have significant strategic implications for the ability of the United States to deter and help our allies to resist Russian aggression.

The ground forces still forward-stationed in Europe could be used to reinforce the Baltic states. However, based on our analysis, RAND estimates that these forces alone would be insufficient to prevent the rapid overrun of Estonia, Latvia, and Lithuania.⁵⁷ To prevent the rapid overrun of the Baltic states, NATO—and the United States—would need to station three armored brigades and supporting forces in the Baltics⁵⁸ in concert with the three NATO infantry brigades and one Stryker brigade that can be deployed on short warning.⁵⁹

Ultimately, either the United States or our NATO allies could provide these armored brigades. However, our NATO allies have drastically reduced their ground forces. Even the most capable of them—including the United Kingdom, France, and Germany—are each unlikely at present to be able to maintain a ready armored brigade on deployed status indefinitely.⁶⁰ In the near-term, then, the three armored brigade combat teams along with the forces directly commanding and supporting them would have to be provided by the United States. As the deployments extend over time, the number of component companies, battalions, brigades, and supporting units that our NATO allies provide could probably be increased.

The armored brigades are only part of the required ground force. A division headquarters— with a battle staff able to command a joint and combined-arms fire and maneuver operation—would also be needed. In addition, the ground forces will need air defenses, aviation, combat engineering support, logistics support, and the other requisite capabilities for sustaining a large-scale ground operation. In recent

⁵⁷See “Stop Putin’s Invasion Before It Begins” by Terrence K. Kelly of RAND in *U.S. News & World Report* on March 20, 2015. Estimates in this article, as well as in this testimony, are based on a series of war-games and other analyses RAND has conducted to assess the threat that Russia may pose to eastern European NATO nations. These games are competitive board games, using playing pieces (or “counters”) to represent individual NATO and Russian units, with combat strengths and other characteristics derived from analyses of actual forces. Similarly, combat and other operational results are decided based on substantive assessments from a body of combat simulations and analyses. The players of these games were RAND staff members, military fellows in residence at RAND, and outside players invited from the DoD.

⁵⁸An alternative concept would be to station these forces in Poland. However, the ability of Poland-based forces to maneuver through the short common border between the Russian enclave of Kaliningrad and Russian ally Belarus and arrive in Lithuania, Latvia, and Estonia before Russian forces can overrun these countries would need to be established.

⁵⁹These quick-response brigades include the US 2nd Stryker Cavalry Regiment, the 173rd Airborne Brigade Combat Team, the brigade combat team of the 82nd Airborne Division assigned as part of the Global Response Force (GRF), and the newly established “Spearhead Force” of the NATO Rapid Reaction Force. See NATO to triple size of reaction force, Pierre Meilhan and Steve Almasy, CNN, Updated 8:45 PM ET, Wed June 24, 2015

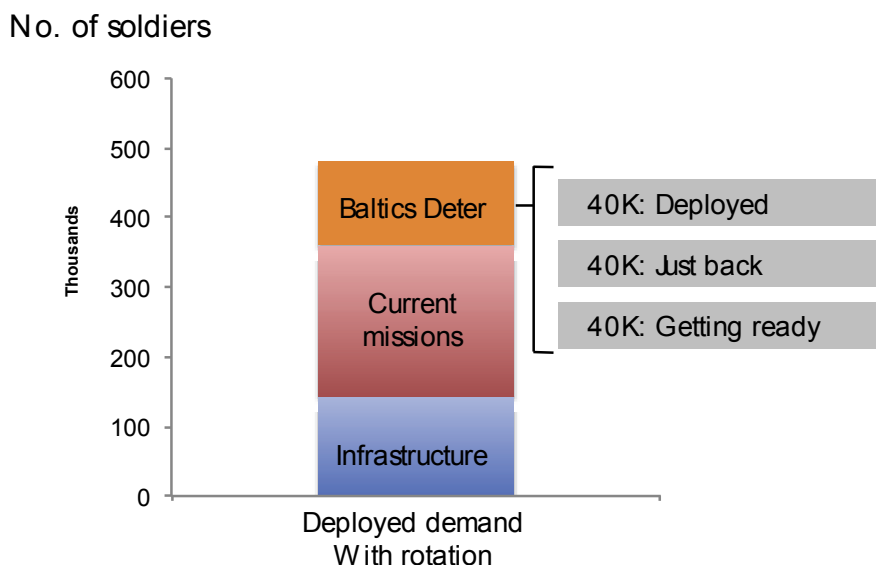
⁶⁰See *Setting Priorities in the Age of Austerity - British, French, and German Experiences*, Michael Shurkin, RAND, RR-220, 2014.

operations, for every soldier in a combat division, the United States would need to deploy 2.2 soldiers in other theater and supporting forces to fulfill these theater-wide combat and support roles.⁶¹

On average, the new three-battalion U.S. Army brigade combat teams comprise 4,500 soldiers.⁶² With a ratio of 2.2:1 theater to BCT forces, maintaining three armored brigade combat teams in the field requires 40,000 soldiers in addition to those already stationed in Europe or on rotational deployment. These ground forces would be supported by air and sea power from the United States and our NATO allies.

Figure 4 builds on the currently committed forces indicated in Figure 3 and illustrates the additional forces needed to deter Russian aggression if deployed on a rotational basis, as discussed above.

Figure 4. Army Forces Needed to Deter Aggression in Baltics



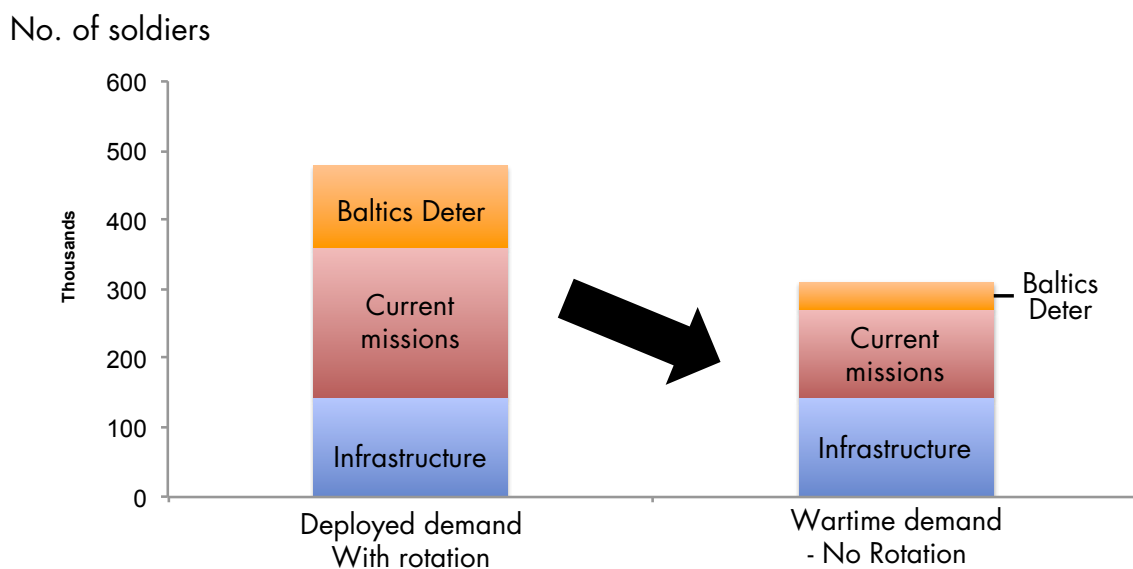
⁶¹See "On POINT," COL Gregory Fontenot, et al, Office of the Chief of Staff US Army, Washington, DC, 2004; and *An Analysis of the Army's Transformation Programs and Possible Alternatives*, Congress Of The United States, Congressional Budget Office (CBO), June 2009. During major combat operations in Iraq, a total of 186,000 Army uniformed personnel were deployed to OIF supporting a force of 5 Army divisions and their equivalents. Using a standard division size of 17,300 soldiers, this yields a ratio of 2.2:1. One could observe that these theater-wide forces also supported the 1st Marine Division and the British 1st (UK) Armoured Division – which would imply a lower support-to-division ratio. On the other hand, the echelon-above-division artillery, air defense, combat engineering, aviation, and other supporting forces needed in a fight with the Russians is likely to be far greater than that needed to defeat the 2003 Iraqi Army. In practice, some of the required forces above the division level will comprise a "fixed cost" of providing a theater combat capability, some will vary with the nature of the mission and the threat, and some will scale with the number of combat divisions deployed. All things considered, we view the 2.2:1 ratio as providing a fair estimate.

⁶²"Brigade combat teams cut at 10 posts will help other BCTs grow", June 25, 2013, C. Todd Lopez, *Army News*.

If executed on a rotational basis, the mission to deter Russian aggression would require 120,000 soldiers—40,000 deployed, 40,000 just back from deployment, and 40,000 getting ready to deploy, as shown in Figure 4. These numbers could be reduced to just 40,000 total soldiers if they were deployed forward rather than on a rotational basis. All told, approximately 480,000 soldiers are required to satisfy the combined infrastructure, current missions, and Baltic deterrence demands.

Figure 5 describes the effects of eliminating troop rotations, for example, during wartime. If we eliminated all rotations in the current missions and the Baltic deter force, total demand could be reduced to 310,000 soldiers. For the remainder of this testimony, I will consider demand in terms of the first and subsequent years of wartime, where the DoD may be compelled to impose stressful troop deployment lengths and frequency to satisfy the demand for ground forces. Thus, for the graphics that follow, we will use the right-hand-side bars—wartime demand—as the building block.

Figure 5. Ending Troop Rotations Reduces Demand

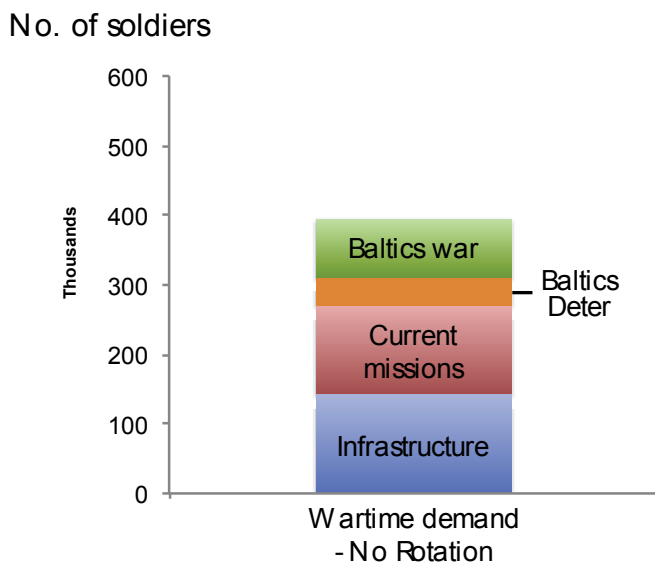


If deterrence fails, and Russia attacked the Baltic NATO nations, the early-entry forces could be surrounded, and additional forces would be necessary to restore lines of communications to the Baltic capitals. RAND estimates that an additional 14 brigades and their accompanying enablers will be needed, with perhaps 6 coming from the United States and 8 from our NATO allies, along with supporting air and sea forces.⁶³ The additional 6 BCTs and 86,000 U.S. soldiers needed to reinforce the brigades

⁶³Ideally the NATO deterrent and reinforcements would be a mix of US and European forces. Though the United States may have to bear the greatest burden in the short-term, that can and should change over time. NATO allies

stationed in the Baltics are shown in Figure 6 below. This includes troops providing higher headquarters battle staffs, air- and missile defense, logistics, medical, engineering, and other echelon-above-brigade combat and support functions.

Figure 6. Army Forces Needed to Defeat Aggression in Baltics



Mitigating the Dangers of “Loose Nukes” in North Korea

As time goes on, a conventional North Korean invasion seems increasingly unlikely, since the South Korean Army would enjoy the advantages of the defense with U.S. airpower and enablers in support. However, a conflict with North Korea could begin with a series of escalations that end in an artillery barrage of Seoul that would necessitate offensive operations. Given the scale of the North Korean artillery threat and the potential use of WMD, once a barrage began it would almost certainly be necessary for South Korea to evacuate large portions of Seoul. Permanently eliminating this artillery threat would likely be a necessary pre-condition for returning home, meaning that North Korean artillery would need to be pushed back 50–100 kilometers or more to be out of range.

should provide 6 ABCTs ready to fight within 20 days of alert which could be split between the deterrent force in the Baltics and the reinforcements coming by sea or from Poland. The United States should be ready to provide a total of 6 armored and 5 infantry or Stryker BCTs, 2 or 3 division headquarters, and other theater-wide combat and supporting capabilities for the deterrent and reinforcements. RAND estimates that our European NATO allies would have to provide an equal number of combat brigades and supporting forces.

While long-range air and missile fires might reduce the firing rate of North Korean artillery, the elimination of a barrage threat could not be guaranteed until ground forces were employed to seize and secure their firing positions, most of which are in fortified bunkers and collocated with the largest concentrations of North Korean ground forces. This would be a massive undertaking, requiring a general offensive along the length of the border and involving large numbers of South Korean and U.S. troops. These troops would have to be prepared to face chemical and perhaps nuclear weapons employed to slow their advance. Any North Korean employment of WMD might cause the United States and South Korea to push further north to eliminate these weapons and the continuing threat they may pose to South Korea, Japan, and the United States. It would be safe to assume that the total size of the US ground commitment could be similar to the U.S. Army deployments to OIF—approximately 186,000 soldiers.⁶⁴

Alternatively, North Korea might suddenly collapse—either as a result of war or the failure of its economy and government. After such a collapse, a key U.S. concern would be to find, seize, secure, and remove its WMDs, in particular its nuclear weapons. In such an event, the greatest burden would likely fall on U.S. forces to eliminate these weapons. South Korean forces would likely be focused on eliminating the North Korean artillery threatening Seoul, establishing political control over captured territory, addressing the massive humanitarian catastrophe that is certain to accompany a collapse, and neutralizing any North Korean military units that choose to oppose South Korean operations.⁶⁵ Chinese forces might also enter North Korea—for example, coming south to control refugees fleeing north—but might not penetrate far enough to take control of many of the WMD sites believed to exist.

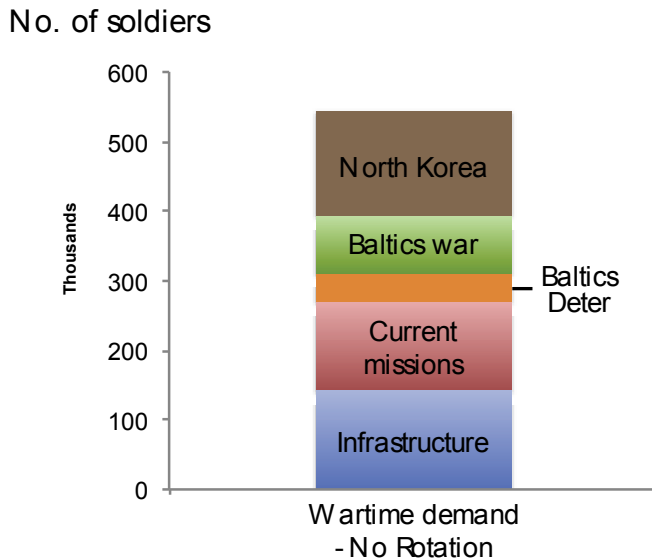
U.S. air, sea, and ground forces would be needed to interdict movements of WMD—especially out of the country—and protect operations from North Korean military units. U.S. ground forces will be needed to provide WMD-elimination (WMD-E) task forces, ground combat forces to protect them, and engineering and logistics units to sustain their operations.

⁶⁴The 1993 Bottom-Up Review estimated 4-5 Army divisions and 4-5 Marine Expeditionary Brigades, along with significant air and sea forces, would be needed to defeat North Korean forces. See *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October, 1993. For our estimate, we presume that many of the ground forces forward-stationed in the Asia-Pacific would be used to supply some of these soldiers. In very approximate terms, a good starting point for the additional U.S. forces needed to counter a North Korean artillery attack would be a force of about the same size as that needed to find, seize, and secure their nuclear program. That estimate—as we shall presently describe—is 188,000 soldiers, requiring another 150,000 soldiers over those that could be made available from forward-stationed forces.

⁶⁵The demands placed upon the South Korean army come at a time when it will be decreasing in size by one-third from its peak. See Bonds et al, 2014.

RAND estimates that a North Korean collapse would require an additional 150,000 U.S. troops over and above the forces already stationed and presumed to be available in the Asia–Pacific region.⁶⁶ The additional ground force requirements would be 150,000 soldiers, as shown in Figure 7.⁶⁷

Figure 7. Army Forces Needed to Eliminate WMD After North Korean Collapse



Assumptions and Constraints

Before we proceed, it is important to note some of the key assumptions that we have made in our analysis of demand. The Army and Marine Corps must grapple with a host of constraints that will limit their ability to supply the numbers of ground forces demanded. In this section, we will quickly describe our assumptions about the demand and supply of ground forces and some of the constraints on supply that have emerged in past operations.

⁶⁶The total force ground force needed for WMD-elimination is estimated to be 188,000 soldiers in Bonds et al (2014). A total of 38,000 soldiers forward- or rotationally-deployed in the Asia Pacific would be utilized for these operations in North Korea. That leaves the need for an additional 150,000 soldiers to conduct this mission.

⁶⁷For this analysis, we assume that the soldiers stationed in Japan would need to remain there to defeat air, missile, and SOF threats against Japan. We presume that all the rotational soldiers in South Korea would be available to conduct counter-WMD operations in operations in North Korea, along with half of the soldiers forward-stationed in South Korea and 75 percent of the soldiers in Alaska and Hawaii. We assume that the remaining soldiers in South Korea, Alaska, and Hawaii would perform theater air and missile defense, security, logistics, medical, reception, staging, onward movement, and integration, RSOI, and other rear-area missions in South Korea and at other locations in the Asia Pacific region.

Simultaneity—It is far from certain that the United States will be faced with both Russian aggression against our NATO allies and a North Korean attack or collapse at the same moment. However, it is prudent that we should consider such simultaneous demands both as a “stress test” and to hedge against an adversary taking advantage of a perceived opportunity when our forces are focused elsewhere. One approach to deal with more than one large contingency at the same time is Win-Deny/Punish, in which a combined-arms force wins the first conflict, and a limited force—perhaps one not including U.S. ground forces—denies an adversary his objectives (or otherwise punishes him) in a second war.⁶⁸ When the first contingency has been won, troops would then flow to the second contingency.

This concept was plausible in the Bottom-Up Review (BUR), because the illustrative planning cases featured conventional ground invasions against allies who had their own ground forces and could trade territory for time, during which the U.S. Air Force would attrite the enemy ground formations.

Unfortunately, this approach is not plausibly applicable in the scenarios we assessed. The Baltic nations have neither enough ground forces to stop the Russians, nor enough geographical depth to expose Russian tanks to U.S. air attacks long enough for them to be broken. To make matters worse, U.S. aircraft would themselves be exposed to sophisticated air defenses covering most of our ingress routes. In South Korea, the biggest threat may now be a North Korean artillery barrage. Long-range air and artillery fires are unlikely to be sufficient to silence this barrage, given the thousands of hardened, underground bunkers from which they are believed to operate. While a mission to secure loose nuclear weapons after a North Korean collapse could conceivably wait until U.S. ground forces become available, the longer that operation is delayed the greater the opportunities to steal, hide, and smuggle weapons out off the peninsula for sale to others.

An alternative approach is to have a Joint combined-arms force—including ground forces—ready for two major contingencies. This approach reduces the danger that an adversary will strike when we are at war elsewhere. However, it requires more money and personnel to maintain the larger force size required.⁶⁹

Deterrence—Our analysis assumes that deterrence requires an Army force sufficient to prevent overrun of the Baltics. (Note that the force we have assessed is not enough to defeat a Russian invasion, but it would offer a serious enough fight that it could plausibly hold out until reinforcements could arrive.) It is possible that other options exist. For example, the United States might be able to successfully threaten to employ economic sanctions or other military measures to dissuade Russia from attacking. However, such “punishment” or horizontal escalation strategies are also uncertain of success. A full analysis of

⁶⁸See *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, Leon Panetta, January 2012. This document, also known as the Defense Strategic Guidance, takes the “win-hold-win” concept of the Bottom-Up Review (BUR) a step further by potentially removing ground forces from the second scenario. See also *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993

⁶⁹Ultimately, this is the approach selected in the 1993 Bottom-Up Review. See Aspin (1993).

how to deter Russia is beyond the scope of this testimony, and RAND acknowledges that how the United States should deter Russia remains an open question. RAND has chosen the most direct means of deterrence: make it expensive for Russia to try to take the Baltics and very uncertain that they will succeed.

Wartime Replacements, Reserve, and Rotations—RAND conducted the force sizing analysis that follows using a rotational model for deployment during wartime. What we found is that absent an increase in end-strength, units would have to deploy for a year at a time with about 9 months between deployments, including time to and from theater and training time at home station. An alternate approach is to keep Army units deployed for the duration (taking units temporarily off the line but keeping them forward-deployed as needed). Yet another approach is to keep unit “flags” deployed, but to rotate individuals. The relative merits and risks of these approaches has been the subject of some discussion within DoD in recent years.

Ultimately, if one or more contingencies happen, the Army will be compelled to do whatever it must to meet the demand for soldiers. In our simplified analysis here, we treat the availability of fresh soldiers in a second year as a potential source of troops to serve as replacements and a reserve to cover some demands and constraints that we have not directly assessed. These demands and constraints include the following:

- **Replacements for casualties**—Units will experience casualties in combat that must be reflected in the expected demands for troops over time. For example, the Army held 12,000 injured and wounded soldiers within Warrior Transition Units (WTUs) during the troop “surge” in Iraq.⁷⁰ North Korean and Russian military forces—given their size, motivation, geographical advantages, and other factors—have the potential to inflict many more. U.S. forces would thereby require access to a pool of new troops to replace those lost to death, wounds, and other injuries.
- **Replacements for friction**—Line units can have soldiers unable to deploy for literally dozens of reasons, including health issues (not accounted for in WTUs above), family readiness issues, certain Uniform Code of Military Justice infractions or other legal issues, because they have not completed the training needed, have deployed too recently, etc. During operations in Iraq and Afghanistan, approximately 10 percent of soldiers in deploying units were non-deployable at any given time.⁷¹ If this same friction factor were applied to this analysis, another 40,000 ground troops would be needed to meet the combined mission requirements

⁷⁰Warrior Leader Describes Good Care, Fred W. Baker III, American Forces Press Service, MEDCOM NOW, Vol. 2, No. 12, Office of the Army Surgeon General and Army Medical Command, Dec. 1, 2008.

⁷¹Non-deployable soldiers: Understanding the Army’s Challenge, US Army War College, USAWC Class of 2011, U.S. Army War College, Carlisle Barracks, PA

estimated here. Once again, backfilling these troops requires access to additional soldiers from units not yet committed to deploy.

- **Reserve for harder fights than expected**—RAND assumed that the forces we estimated would be sufficient to achieve our objectives in each of our exemplar missions. These fights could grow in size or be harder than expected. Winning these fights could require more forces and/or a different mix of specialties than first anticipated. The DoD will need some flexible reserve pool of units and troops that can be tapped to meet such increases in demand.
- **Rotational relief**—It is unknown what effects the high deployment tempo and other measure will have on the ability of the Army to maintain its high performance standards and its end-strength. Some rotational relief may be needed to ensure that the All-Volunteer Force remains viable if contingencies stretch into a second or third year.
- **Readiness and Mobilization**—The level of ground force utilization depicted here would put extraordinary pressures on Army readiness. Essentially, our analyses assume that every active soldier is ready for deployment, and that every reserve component soldier can be mobilized in either the first or second year of the conflict. (Please note that total mobilization is something the United States has not done since World War II). Prior to deployment to OIF or OEF, Army brigades underwent a major readiness exercise (MRE). In FY 15, the two U.S. combat training centers (Fort Irwin California and Fort Polk Louisiana) had a combined capacity of 21 such exercises each year. Keeping 30 active and 5 reserve component BCTs ready to go today—if ready means having an MRE within the past 12 months—exceeds the peak-capacity of these centers and may reduce the number of brigades available at the beginning of a conflict.⁷² (An additional center exists at Hohenfels in Germany, but it will likely remain busy training NATO partners.) Prior to deployment, additional preparation days are required for reserve component units, which may decrease the availability of these troops early in a conflict and may slow the speed at which newly mobilized units may be deployed. In OIF and OEF, Army National Guard brigade combat teams required between 118 and 165 days of preparation (including days expended per unit both pre- and post-mobilization) prior to arriving in theater. Army Reserve and National Guard enabler units at the company level could be prepared more quickly, averaging between 87 and 102 days of preparation required.⁷³
- **Ground force fungibility**—RAND makes the implicit assumption in this analysis that soldiers and marines—irrespective of military occupational specialties and unit types—are interchangeable and can be applied to any mission. In reality, artillerymen cannot be

⁷²See *United States Department of Defense Fiscal Year 2015 Budget Request Overview*, Office of the Under Secretary of Defense (Comptroller)/ Chief Financial Officer, March 2014. At a 1:5 BOG:Dwell ratio 1/6th of the Guard BCTs could be deployed. Hence, 5 should be ready at any given time.

⁷³*Assessing the Army's Active-Reserve Component Force Mix*, Joshua Klimas et al, RAND, RR-417-1, 2014

instantaneously substituted for infantrymen, medical service corps troops, aviators, etc.—nor they for artillerymen. At any given time, the Army and Marine Corps provide the mix of specialties and unit types that they believe will best meet mission demands. If conflict were to require more armored units, air defenders, and artillerymen than expected, then it would take some time to change the force mix—through re-training and growing new units—to reflect the new needs. The Army will be particularly stretched in this fashion, because it provides a broad range of occupational and unit types. This is a special type of “friction” that must be added to the frictions mentioned above.

- **High-priority missions**—The Army provides critical capabilities across high-priority missions not specifically addressed in this analysis. For example, the U.S. Army provides the largest service share of the 66,000 SOF employed around the world, as well as critical missile-defense capabilities like the Patriot units operating in Turkey and the Persian Gulf and the Terminal High-Altitude Area Defense (THAAD) units operating in Guam. Both the Army and the Marine Corps also provide forces that can respond quickly to rapidly developing crises: the Army with the Global Response Force based upon the 82nd Airborne Division and the XVIII Airborne Corps, and the Marine Corps with its quick-response forces based in Kuwait and Moron Airbase, Spain. Apart from the exemplar missions assessed here, demand for each of these kinds of forces is likely to remain strong and may actually grow. Growth in these missions would apply more pressure on the already small ground forces.
- **Homeland and State missions**—The National Guard is regularly tasked to provide support for missions in the U.S. homeland, both in its State Active Duty role and in its federal Title 32 role. On any given day, the National Guard reports that an average of 6,300 Guard members are supporting domestic missions.⁷⁴ These include providing relief in natural disasters and supporting special events and law enforcement missions. It is likely that state governors will want to keep some of these forces at home, even when overseas contingencies take place. And NORTHCOM may need to maintain some forces in the United States for specialized missions like WMD consequence management and other homeland defense missions.

Comparing the Demand and Supply of Ground Forces

The total ground force demand— given these assumptions we have made and recognizing the constraints the Army will have in meeting these demands, sums to approximately 545,000 troops as depicted in Figure 7. This demand could be met in the first year of a contingency if the Army can deploy

⁷⁴ 2015 National Guard Bureau Posture Statement, accessed online 7 August, 2015 at <http://www.nationalguard.mil/portals/31/Documents/PostureStatements/2015%20National%20Guard%20Bureau%20Posture%20Statement.pdf>

250,000 soldiers out of its planned 307,000 operating force.⁷⁵ This requires more than 80 percent of the operating force to be ready for war immediately. In addition, this plan would also require that 86,000 reserve component soldiers be ready immediately⁷⁶ and that 69,000 active and reserve component marines are deployed, as shown in Figure 8 below.⁷⁷

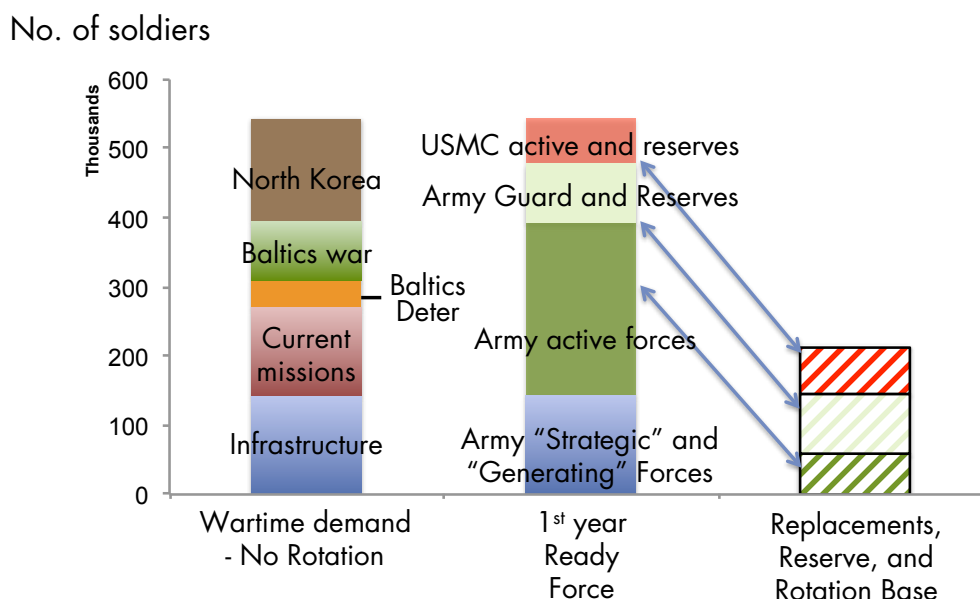
However, only 59,000 active component soldiers would be available to serve as replacements, reserves if more soldiers were needed, or to allow the first-in troops to rotate out of combat if deployments continued into a second year. These could be augmented by an additional mobilization and deployment of reserve component soldiers, and the commitment of the remaining marines. However, this plan could place extraordinary demands on U.S. ground forces if ground force commitments to the conflicts continued past the first year.

⁷⁵At an active end-strength of 450,000, and with 143,000 in the “Generating Force” or “Institutional Army”, 307,000 soldiers are available for operations.

⁷⁶These would come from 335,000 Army National Guard soldiers (minus 35,500 soldiers in the Generating Force and 2,000 soldiers in the Trainees, Transients, Holders, and Students (TTHS) account), and 195,000 Army Reserve soldiers (minus 48,500 soldiers in the Generating Force and 12,000 soldiers in the TTHS account) deployed on a 1:4 BOG:dwel ratio. These numbers are derived from the following source: Army Posture Statement, 2003, 2009, 2010, 2011 and 2012; Defense Manpower Requirements Report, 2015; and *An Analysis of the Army’s Transformation Programs and Possible Alternatives*, Congress of the United States, Congressional Budget Office (CBO), June 2009.

⁷⁷For this analysis, active component marines were deployed on a 1:1 basis, and reserve component marines on a 1:4 BOG:dwel ratio. This comprises 184,000 active marines: subtracting 32,000 in the Generating Force, 28,000 in the TTHS account, and 2450 guarding Embassies and 39,600 reserve marines minus 5800 in the Generating Force. Sources: Defense Manpower Requirements Report, the Department of Defense, 2015; and United States Department Of State Bureau Of Diplomatic Security, United States Marine Security Guards: Safeguarding American Missions Around The World, Washington, DC, November 2013.

Figure 8. One-Year Surge Capacity Using All Planned Soldiers and Marines



Ground force deployments might continue to these contingencies even if the fighting phase of the conflict ended within the first year. In the Baltics, for example, U.S. forces might remain after expelling the Russians to ensure that they did not resume fighting as soon U.S. forces were to leave. In a Korean collapse scenario, forces would likely remain long enough to find WMD, their component materials and production facilities, and the personnel associated with these activities. Both types of operations might require significant numbers of forces to remain long after kinetic operations had been concluded.

Additional factors we mentioned earlier might increase demand. Demand could rise if conflicts are harder, longer, or bloodier than planned. Therefore, some reserve will be needed from which to draw reinforcements if the war is harder than anticipated. And kinetic conflicts—such as operations to degrade ISIL, defeat aggression in the Baltics, or eliminate WMD in North Korea—will demand replacements for casualties and other deployment “frictions.” Realistically, some new troops will be needed to replace casualties, make up for frictional factors, and allow front-line troops to rest.

On the supply side, it may not be possible to deploy this many active and reserve component soldiers and marines. To generate Figure 8, RAND assumed that the Army could deploy 80 percent of its active component operating forces and 20 percent of its reserve component operating forces, while RAND assumed the Marine Corps could deploy 50 percent of its active component operating force and 20 percent of its reserve operating force. These rates exceed the maximum deployment percentages in any given month during the combination of OIF and OEF. In OIF and OEF, during the month in which each

service contributed their *maximum* percentage of troops, the Army and Marine Corps deployed the following percentages of each component's end-strength⁷⁸:

- 30 percent of the Army active component;
- 19 percent of the Army National Guard;
- 15 percent of the Army Reserve;
- 31 percent of the Marine active component;
- 26 percent of the Marine Reserve.

Furthermore, the *average*—as opposed to the *maximum*—deployment rates of Army and Marine Corps troops from March 2003 through September 2011 were still lower. This covers the period of major combat operations in Iraq through the beginning of the Iraq drawdown.⁷⁹ In OIF and OEF, in an average month, the Army and Marine Corps deployed the following percentages of each component's end-strength:

- 23 percent of the Army active component;
- 11 percent of the Army National Guard;
- 9 percent of the Army Reserve;
- 16 percent of the Marine active component;
- 16 percent of the Marine Reserve.

Filling Gaps In Supply of Ground Forces Needed

To increase the numbers of soldiers and marines available (and fill the gaps), one or more of the following approaches could be used.

Grow the Army and Marine Corps Active and Reserve Components. During the combination of OIF and OEF, the Army active component grew by 85,000 soldiers in the nine years from 2001 through 2010.⁸⁰ The end-strength of the reserve components fluctuated considerably, but added a net total of 11,000 soldiers over this same time period. In the best of these years (FY2008), the Army added 22,000 soldiers in the active component and 14,000 in the reserve components. Over the same time period, the Marine Corps increased by 24,000 active component Marines, with 12,000 of these in 2008.

⁷⁸Defense Manpower Data Center, Contingency Tracking System, July 2012. For most Service Components, the maximum month occurred around May of 2003 – when major combat operations in Iraq were reaching their conclusion. However, Army National Guard forces peaked much later when they were used to relieve Active Component forces.

⁷⁹Several months in 2004 featured the lowest deployments of active component soldiers, presumably because of the beginning of the force rotations. These months will depress the overall averages a small amount.

⁸⁰National Defense Budget Estimates for FY 2016, Office of the Under Secretary of Defense (Comptroller), March 2015, and DMRR (2001 through 2015).

However, while growth can be an important part of an overall strategy, even the best growth year experienced (2008) provided 34,000 active and 11,000 reserve troops. At a 1:1 active BOG:Dwell ratio and a 1:4 reserve BOG:Dwell ratio, this would yield 19,000 additional troops that could be maintained on deployment each year. At this rate of growth, it would take several-- years to close the ground forces shortfall for the missions considered not counting the additional time required to organize, train and equip new brigade-sized units.

Increase Ground Force Size Ahead of Contingencies. To add the number of deployed troops needed, either 190,000 additional active-component troops would be needed (if deployed at for 12 months) or 475,000 reserve component soldiers (if utilized at 1:4 BOG:Dwell). Although doing this is perhaps the most certain way of providing the needed troop numbers, this may also be the most expensive.

Increase Deployment Length. Finally, the length of deployments can be increased. Assuming an ever-longer deployment means each soldier and marine will have to remain effective longer in a dangerous and difficult operation. Still, this may be what the nation is forced to ask its ground forces to do if we do not sufficiently size them for commitments.

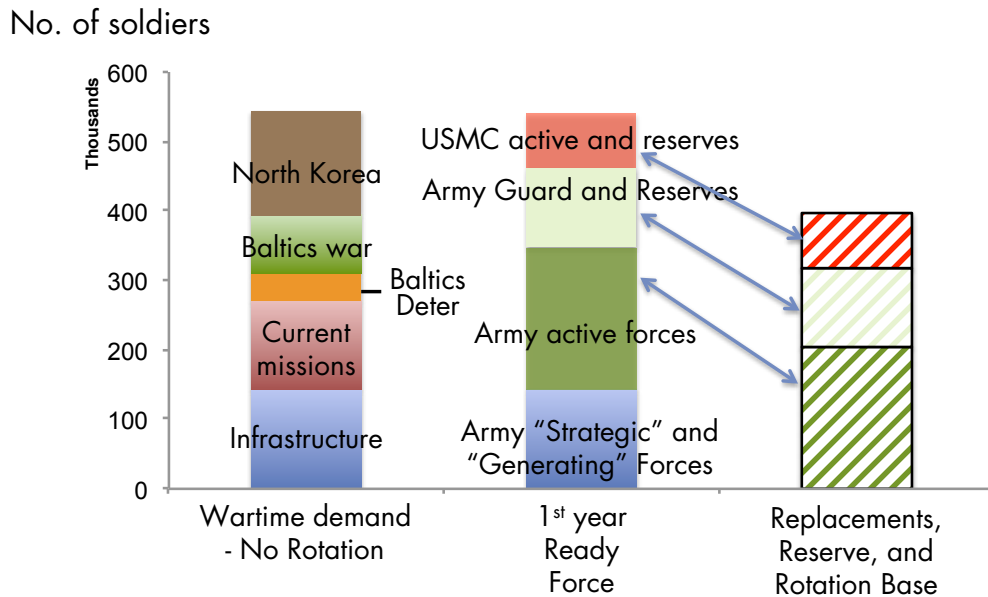
In Figure 9 below, we show just one example of the many possible combinations of these measures to meet demand. In this example, Army and Marine Corps end-strength is maintained at the planned FY15 level. That provides 490,000 Army active components soldiers, with the National Guard and Army Reserve at 350,000 and 202,000, respectively, while the active Marine Corps end-strength is at 184,000 and the Marine Corps Reserve is at 39,000.^{81,82} The deployment length for active ground forces is set at 15 months for sizing purposes—meaning that troops would have just 10 months to return from theater, reset, train, and return to theater between one-year combat deployments if they are able to rotate out of the fight. (As mentioned earlier, the availability of fresh soldiers to enable a rotation depends on the number used to replace casualties, cover the frictions mentioned earlier, or deployed to win the fight if it requires more troops than RAND estimated). The deployment length for the reserve components is set to 12 months and their BOG:Dwell rate is set at 1:3. The active and reserve component end-strength are then grown—we assume here at the maximum annual growth rates achieved during OIF and OEF mentioned above—allowing BOG-Dwell rates to fall after the second year and subsequent years. It is important to note that all existing soldiers are assumed to be available for these missions. State missions

⁸¹Department Of The Army *Fiscal Year (Fy) 2015 Budget Estimates* Volume I, National Guard Personnel, Army, March 2014.

⁸²The 2015 National Defense Authorization Act set the Army Reserve end-strength objective at 202,000 soldiers – though the Army Reserve reported a strength of slightly less than 198,000 soldiers in the Army Reserve Posture Statement. See The United States Army Reserve 2015 Posture Statement, *America's Army Reserve: A Life-Saving, Life-Sustaining Citizen- Soldier Force For The Nation*, Submitted By Lieutenant General Jeffrey W. Talley.

or national emergencies in the homeland would be an additional demand on National Guard and supporting federal forces.

Figure 9. Example— Adjusting Force Size and Deployment Length to Meet the Gap



What Are Some Alternative Approaches to Limit Regret?

The estimates presented in this testimony indicate that the United States has insufficient ground forces—from both the Army and Marine Corps—if faced with continuing demands to “degrade or destroy” violent extremist groups like ISIL, deter or defeat Russian aggression against NATO Baltic nations, and eliminate “loose nukes” in a collapsed North Korea. The United States would not have the ability to meet the demand for troops to deal with these missions in the Middle East, Baltics, and in North Korea, unless we make some changes, such as those presented in Figure 9. Not being able to meet the demand posed here would lead to regret.

What can we do to limit regret? First, policymakers could simply acknowledge that we will be unable to commit U.S. ground forces to more than one big conflict at a time and accept the regret that may come with failing to meet other commitments we have made to our allies. For example, if Russia began to make menacing moves toward the Baltics, and the United States commits its ground force to this contingency, they would then be unavailable to help South Korea or to secure loose nuclear weapons. The opposite example would also pose a dilemma: If a Korean contingency happened first, the United

States could commit its ground force to fulfill its treaty obligations, but at the risk of Russia taking advantage of this distraction to attack the Baltic states. The United States could try to “split the difference,” sending some ground forces to help South Korea while reserving some to help protect the Baltic states, but without having enough to “win” in either contingency.

A variant on this approach is the concept that the U.S. would “win” in a first contingency and “hold” in a second contingency. While this approach would in principle allow U.S. ground forces to finish operations in a first contingency before moving to the second one, it has some potentially fatal flaws. Without armored forces on the ground in the Baltics, RAND analyses indicate that NATO cannot prevent a Russian overrun of these allied states. Similarly, without sufficient ground forces in Korea, we do not believe that the Combined Forces Command will have enough ground forces to stop a North Korean artillery barrage or be able to find, secure, and seize loose nukes at North Korean sites. If RAND estimates are correct, then “win and hold” is not a viable strategy, potentially leading to a serious loss in the second contingency that may only be reversible at great cost.

Second, the United States could reduce the troops it is willing to commit to all missions and demand that allies and partners take on a greater share of the burden. But as we mentioned earlier, this approach ignores the fact that our most capable allies are currently cutting their ground forces more than we are and that they rely on U.S. ground forces for much of the combat and logistics support they receive during deployed operations.

Third, the United States could pull back from current ongoing missions that require significant forces, such as Iraq and Afghanistan, realizing this has already proven difficult to do in practice. Pulling back from current deployed counter-terror operations may increase the threat that an unchecked ISIL, al Qaeda, or Taliban might pose to the United States and our allies. Pulling forces out of the Persian Gulf might encourage Iran to act more aggressively toward its neighbors.

Fourth, the United States could employ some of the mechanisms noted earlier to increase the supply of ground forces available. The most important of these would be to pause the current troop drawdown until new threats are fully addressed. As of the end of 2015, the Army is planned to have 490,000 soldiers in its active force—40,000 more soldiers than shown in RAND initial comparisons—and the reserve components are planned to drop by a further 20,000 soldiers. The costs of retaining these troops could be resourced with Overseas Contingency Operations (OCO) funding, which could end when threats have diminished and the drawdown could then be resumed. The Army and Marine Corps could also grow end-strength further once a conflict began or seemed reasonably certain of beginning. Some additional soldiers could be generated in a national emergency by imposing “Stop Loss”—that is, limiting the ability of soldiers to retire or separate—and perhaps recalling some soldiers to active duty and using Navy and

Air Force troops “in lieu of” ground forces for some tasks. These last three options—those other than pausing the current drawdown—would yield limited additional numbers of troops, but even limited numbers may be helpful in the short-term.

The options in the fourth group assume that every active-component soldier is available and that every reserve-component soldier is mobilized and provided for national missions. However, readiness problems are likely to emerge, because the demands on the forces reflected in RAND analysis will significantly exceed those imposed on ground forces in the recent Iraq and Afghanistan wars. Additional resources will be needed to ensure that active and reserve component soldiers are ready for immediate deployment.

Conclusions and Recommendations

RAND analysis here compared three of our largest national security commitments—combatting the persistent threat of terrorism, assuring allies and deterring aggression in multiple theaters, and preventing the spread and use of WMD—to our force plans. RAND has found shortcomings for each—the scope and scale of ISIL threats is not anticipated, the Russian invasion of the Ukraine and the potential threat to NATO Baltic states is not anticipated, and the scope and scale of eliminating North Korean WMD program is larger than what has been resourced.

If the United States is unable to meet these commitments, it will lead to regret. To better understand the ability of the United States to meet these commitments in terms of providing sufficient ready troops, RAND evaluated three missions: degrading ISIL and other violent extremist groups, deterring or defeating Russian aggression against the NATO Baltic states, and facing North Korean provocations, attack, or collapse and the resultant need to deal with “loose nukes.” That evaluation showed that the United States has insufficient ground forces—both from the Army and Marines—to meet the demands of the three missions—leaving significant troop shortfall. Although there are some options for addressing the shortfall, some options are both challenging and not that palatable.

To make this shortfall potentially more serious, the contingencies outlined in this testimony are only the most obvious possibilities. The Army is headed for potentially dangerously low levels of capabilities and will have difficulty in meeting foreseeable challenges. But experience suggests that the most obvious threats are not the most likely to eventuate, precisely because they can be foreseen. This means that there is even less margin available for meeting unforeseeable challenges, which in aggregate may be more demanding than those we can envisage. Unforeseen events become much more problematic when we have a one campaign Army, because the Army could not then respond without compromising

deterrence in both Korea and the Baltics.

Given these conclusions, to address the risks we see in meeting U.S. commitments and to limit the regret from not meeting them, RAND recommends that the Administration and DoD do the following:

- Pause the current drawdown of Army active and reserve component soldiers until the threat of Russian aggression against NATO states in the Baltics has receded (as discussed above). These additional troops could be funded with OCO funds.
- Resource the highest possible readiness levels in both the active and reserve components. This should include establishing plans for mobilizing the entire National Guard and Army Reserve—something the nation has not done since World War II. The Army should regularly test the readiness of complete active and reserve units.
- Increase the Army's ground force posture in the Baltics and South Korea to speed deployment times. This would entail building the war-supporting infrastructure required, maintaining armored brigades and supporting forces in the Baltics, and assessing a variety of options to rotate or permanently station them there. The United States should also consider options to preposition equipment in both the Baltics and Korea as a deterrent and to speed deployment.

Implementing such recommendations would be, to say the least, challenging; but given the uncertainty our nation faces, they represent the best alternatives for bringing our force planning into accord with our stated commitments and, thus, limiting regret and strategic failures down the road. One could (as discussed earlier in the section on alternatives to limit regret) just accept the imbalance between our stated commitments and our current force planning and, in turn, accept the possibility of regret and strategic failures if the future develops as discussed here, but such an option does not seem very appealing. Of course, the imbalance in stated commitments and force planning works both ways; this means that another alternative to limit regret and strategic failures would be to bring our stated commitments into accord with our current force planning. However, implementing such an alternative would require a fundamental change in how the nation views its national security concerns.